

Henry Hess

Developed the theory of sea-floor spreading which supports the theory of plate tectonics.

I. Plate Tectonics

A. Continental Drift

The hypothesis that states that the continents once formed a single landmass, broke up, and drifted apart to their present locations.

1. Alfred Wegner

Hypothesized continental drift

a. Fossil Evidence

Supported Wegner's theory.

Same species found on Africa and South America.

B. Mid-oceanic Ridges

A long, undersea mountain chain that has a steep, narrow valley at its center, that forms as magma rises from the asthenosphere.

C. Sea-floor Spreading

A process by which new oceanic lithosphere forms as magma rises to Earth's surface and solidifies at a mid-oceanic ridge.

1. Paleomagnetism

The study of the magnetic properties of rocks.

a. Magnetic Reversals

A pattern of normal polarity and reversed polarity.

b. Magnetic symmetry

Pattern on one side of mid-oceanic ridge is an exact mirror image.